

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A vehicle hydraulic brake device comprising a hydraulic pressure source for generating and outputting a predetermined hydraulic pressure, a pressure adjusting valve for adjusting the output hydraulic pressure of said hydraulic pressure source to a value corresponding to a brake operating amount, and wheel cylinders actuated by the output hydraulic pressure of said pressure adjusting valve to impart braking force to wheels of ~~[[the]]~~ a vehicle, further comprising ~~a hydraulic pressure supply passage connected to a hydraulic passage leading from said pressure adjusting valve to said wheel cylinders, a hydraulic pressure supply passage for supplying hydraulic pressure from said hydraulic pressure source to said hydraulic passage at a junction therewith,~~ a first proportional solenoid valve provided in said hydraulic pressure supply passage for reducing the output hydraulic pressure of said hydraulic pressure source ~~and supplying it~~ before being supplied to said hydraulic passage, a second proportional solenoid valve provided in said hydraulic passage at a location between said pressure adjusting valve and said junction and operable for reducing the output hydraulic pressure supplied from said hydraulic pressure supply passage, a check valve provided in parallel to said second proportional valve for allowing fluid flow from said pressure adjusting valve to said junction while bypassing said second proportional solenoid valve, and a controller for controlling said first and second proportional valves, each of said first and second

proportional valves being of the type in which the degree of valve openness is adjustable between a closed position and a plurality of open positions of different degrees of openness, said controller being capable of individually adjusting the degrees of openness of said first and second proportional solenoid valves to required levels between their fully open and fully closed positions to adjust the wheel cylinder pressure to a required level ~~leading from said pressure adjusting valve to said wheel cylinders, a second proportional solenoid valve disposed between said hydraulic pressure supply passage and said pressure adjusting valve for reducing the hydraulic pressure supplied from said hydraulic pressure supply passage, a check valve provided parallel to said second proportional valve and allowing fluid flow from said pressure adjusting valve toward said hydraulic pressure supply passage, and a control means for controlling operations of said first and second proportional solenoid valves, wherein control of the hydraulic pressure supplied to said wheel cylinders during automatic brake control is performed by said first proportional solenoid valve and said second proportional solenoid valve.~~

2. (Currently Amended) A vehicle hydraulic brake device comprising a hydraulic pressure source for generating and outputting a predetermined hydraulic pressure, a pressure adjusting valve for adjusting the output hydraulic pressure of said hydraulic pressure source to a value corresponding to a brake operating amount, a pressure chamber connected to said pressure adjusting valve, a master cylinder including a master piston actuated by the output hydraulic pressure of said pressure adjusting valve introduced into said pressure chamber or the output hydraulic pressure of said pressure adjusting valve introduced into said pressure chamber and the brake

operating force for generating brake hydraulic pressure, and wheel cylinders actuated by the output hydraulic pressure of said master cylinder to impart braking force to wheels of ~~[[the]]~~ a vehicle, further comprising a ~~solenoid valve for supplying the output hydraulic pressure of said pressure adjusting valve to a hydraulic system leading from said master cylinder to said wheel cylinder~~ cylinders, ~~a hydraulic pressure supply passage connected to a hydraulic passage connecting said pressure adjusting valve to said solenoid valve~~ hydraulic system, a solenoid valve in said hydraulic passage, a hydraulic pressure supply passage for supplying hydraulic pressure from said hydraulic pressure source to said hydraulic passage at a junction therewith located upstream of said solenoid valve, a first proportional solenoid valve provided in said hydraulic pressure supply passage for reducing the output hydraulic pressure of said hydraulic pressure source before being supplied to said hydraulic passage, a second proportional solenoid valve provided in said hydraulic passage at a location between said pressure adjusting valve and said junction and operable for reducing hydraulic pressure supplied from said hydraulic pressure supply passage, a check valve provided in parallel to said second proportional valve for allowing fluid flow from said pressure adjusting valve to said junction while bypassing said second proportional solenoid valve, and a controller for controlling said first and second proportional valves, each of said first and second proportional valves being of the type in which the degree of valve openness is adjustable between a closed position and a plurality of open positions of different degrees of openness, said controller being capable of individually adjusting the degrees of openness of said first and second proportional solenoid valves to required levels between their fully open and fully closed positions to adjust the wheel cylinder pressure to a required level and

~~supplying it to said hydraulic passage connecting said pressure adjusting valve to said solenoid valve, a second proportional solenoid valve disposed between said hydraulic pressure supply passage and said pressure adjusting valve for reducing the hydraulic pressure supplied from said hydraulic pressure supply passage, a check valve provided parallel to said second proportional valve and allowing fluid flow from said pressure adjusting valve toward said hydraulic pressure supply passage, and a control means for controlling operations of said solenoid valve and said first and second proportional solenoid valves, wherein control of the hydraulic pressure supplied to said wheel cylinders during automatic brake control is performed by said solenoid valve and said first proportional solenoid valve and said second proportional solenoid valve.~~

3. (Currently Amended) A vehicle hydraulic brake device comprising a hydraulic pressure source for generating and outputting a predetermined hydraulic pressure, a pressure adjusting valve for adjusting the output hydraulic pressure of said hydraulic pressure source to a value corresponding to a brake operating amount, a pressure chamber connected to said pressure adjusting valve, a master cylinder including a master piston actuated by the output hydraulic pressure of said pressure adjusting valve introduced into said pressure chamber or the output hydraulic pressure of said pressure adjusting valve introduced into said pressure chamber and the brake operating force for generating brake hydraulic pressure, and wheel cylinders actuated by the output hydraulic pressure of said master cylinder to impart braking force to wheels of ~~[[the]]~~ a vehicle, further comprising ~~a hydraulic pressure supply passage connected to~~ a hydraulic passage connecting said pressure adjusting valve

to said pressure chamber, a hydraulic pressure supply passage for supplying hydraulic pressure from said hydraulic pressure source to said hydraulic passage at a junction therewith, a first proportional solenoid valve provided in said hydraulic pressure supply passage for reducing the output hydraulic pressure of said hydraulic pressure source and supplying it before being supplied to said hydraulic passage, ~~connecting said pressure adjusting valve to said pressure chamber, a second proportional solenoid valve disposed between said hydraulic pressure supply passage and said pressure adjusting valve for reducing the hydraulic pressure supplied from said hydraulic pressure supply passage, a check valve provided parallel to said second proportional valve and allowing fluid flow from said pressure adjusting valve toward said hydraulic pressure supply passage, and a control means~~ a second proportional solenoid valve provided in said hydraulic passage at a location between said pressure adjusting valve and said junction and operable for reducing the hydraulic pressure supplied from said hydraulic pressure supply passage, a check valve provided in parallel to said second proportional solenoid valve for allowing fluid flow from said pressure adjusting valve to said junction while bypassing said second proportional solenoid valve, and a controller for controlling said first and second proportional valves, each of said first and second proportional valves being of the type in which the degree of valve openness is adjustable between a closed position and a plurality of open positions of different degrees of openness, said controller being capable of individually adjusting the degrees of openness of said first and second proportional solenoid valves to required levels between their fully open and fully closed positions to adjust the wheel cylinder pressure to a required level for controlling operations of said first and second proportional solenoid valves, wherein

~~control of the hydraulic pressure supplied to said wheel cylinders during automatic brake control is performed by said first proportional solenoid valve and said second proportional solenoid valve.~~

4. (Currently Amended) A vehicle hydraulic brake device as claimed in claim 1, further comprising ~~[[means]]~~ a detector for detecting that the output hydraulic pressure of said pressure adjusting valve has become equal to the hydraulic pressure of said hydraulic pressure supply passage, and wherein when it is detected by said ~~[[means]]~~ detector that the output hydraulic pressure of said pressure adjusting valve has become equal to the hydraulic pressure of said hydraulic pressure supply passage, automatic brake control is stopped.

5. (Currently Amended) A vehicle hydraulic brake device as claimed in claim 2, further comprising ~~[[means]]~~ a detector for detecting that the output hydraulic pressure of said pressure adjusting valve has become equal to the hydraulic pressure of said hydraulic pressure supply passage, and wherein when it is detected by said ~~[[means]]~~ detector that the output hydraulic pressure of said pressure adjusting valve has become equal to the hydraulic pressure of said hydraulic pressure supply passage, automatic brake control is stopped.

6. (Currently Amended) A vehicle hydraulic brake device as claimed in claim 3, further comprising ~~[[means]]~~ a detector for detecting that the output hydraulic pressure of said pressure adjusting valve has become equal to the hydraulic pressure of said hydraulic pressure supply passage, and wherein when it is detected

by said ~~[[means]]~~ detector that the output hydraulic pressure of said pressure adjusting valve has become equal to the hydraulic pressure of said hydraulic pressure supply passage, automatic brake control is stopped.

7. (Currently Amended) A vehicle hydraulic brake device as claimed in claim 1, further comprising a wheel cylinder pressure ~~detecting means~~ detector for detecting the hydraulic pressure of said wheel cylinders, and wherein when it is detected that the hydraulic pressure of said wheel cylinders is higher than the hydraulic pressure controlled by said first proportional solenoid valve and said second proportional solenoid valve, automatic brake control is stopped.

8. (Currently Amended) A vehicle hydraulic brake device as claimed in claim 2, further comprising a wheel cylinder pressure ~~detecting means~~ detector for detecting the hydraulic pressure of said wheel cylinders, and wherein when it is detected that the hydraulic pressure of said wheel cylinders is higher than the hydraulic pressure controlled by said first proportional solenoid valve and said second proportional solenoid valve, automatic brake control is stopped.

9. (Currently Amended) A vehicle hydraulic brake device as claimed in claim 3, further comprising a wheel cylinder pressure ~~detecting means~~ detector for detecting the hydraulic pressure of said wheel cylinders, and wherein when it is detected that the hydraulic pressure of said wheel cylinders is higher than the hydraulic pressure controlled by said first proportional solenoid valve and said second proportional solenoid valve, automatic brake control is stopped.

10. (New) A vehicle hydraulic brake device as claimed in claim 1, wherein said hydraulic pressure supply passage is directly connected to said hydraulic pressure source.

11. (New) A vehicle hydraulic brake device as claimed in claim 2, wherein said hydraulic pressure supply passage is directly connected to said hydraulic pressure source.